FILE: BORDER 5.1

cc: MSD
JDB
MOT
PS

SDGE® San Diego Gas & Electric
8306 CENTURY PARK COURT • SAN DIEGO, CA 92123-1593 • 619 / 696-2000

December 27, 2000

Mr. Mike Evans
Coral Energy, L.L.C.
4320 La Jolla Village Dr. Suite 250
San Diego, CA 92122

FILE NO.

Re: Executed Electric System Impact Study Agreement

Dear Mr. Evans:

Enclosed you will find an executed copy of the "Electric System Impact Study Agreement" between San Diego Gas and Electric Company ("SDG&E") and Coral Energy, L.L.C. ("Coral") regarding the proposed electric transmission interconnection service with SDG&E's electric transmission system at the Border and Pala Substations.

SDG&E has received your payment of $25,000 pursuant to Section 11 of the Agreement and will commence work on the proposed Facilities Study.

If you have any questions, please contact me at 858-650-6165.

Sincerely,

Stephen R. Taylor
Senior Energy Administrator

Attachments: Electric System Impact Study Agreement

cc:
T. C. Farrelly (w/o att.)
G. P. Gaebe (w/o att.)
M. J. Iammarino (w/o att.)
D. Korinek
W. P. Sakarias (w/o att.)
J. F. Walsh
A. J. Perez (CAISO)
S. E. Mavis (CAISO)
L. S. Tobias (CAISO)
B. Bowman (Coral)

CORAL POWER, L.L.C.

SAN DIEGO GAS & ELECTRIC COMPANY

ELECTRIC SYSTEM IMPACT STUDY AGREEMENT

This Electric System Impact Study Agreement ("Agreement") dated December ___, 2000 by and between San Diego Gas & Electric Company, a California corporation with its principal offices located at 8306 Century Park Court, San Diego, California 92123 -11593 ("SDG&E"), and Coral Power, L.L.C. ("Coral") with its principal office located at 909 Fannin St. Suite 700; Houston, Texas 77010 with additional offices at 4320 La Jolla Village Drive, #250, San Diego, Ca. 92122, which is a subsidiary of Coral Energy Holding L.P. SDG&E and Coral are each referred to from time to time herein as a "Party" and are collectively referred to herein as the "Parties."

RECITALS

WHEREAS, Coral applied to San Diego Gas & Electric Company ("SDG&E") for an electric transmission interconnection for generation facilities to be located near SDG&E's existing Pala and Border Substations (the "Generators") under the terms of the Transmission Owners Tariff ("TO Tariff"). These Generators would connect to SDG&E's existing 69 kV transmission/substation facilities.

WHEREAS, SDG&E has not performed an Electric System Impact Study for these Coral generation additions.

WHEREAS, SDG&E and Coral accordingly desire to enter into this Electric System Impact Study Agreement providing the terms for SDG&E to perform a study to determine such transmission expansions or upgrades that would be required to accommodate Coral's request to interconnect their generation additions to SDG&E's existing transmission/substation facilities (the "Study").

NOW, THEREFORE, IN CONSIDERATION OF THE MUTUAL PROMISES AND COVENANTS SET FORTH BELOW, THE PARTIES AGREE AS FOLLOWS:

1. **DEFINITIONS:** All terms with initial capitalization not otherwise defined herein shall have the meanings assigned to them in SDG&E's TO Tariff, as amended from time to time, and the California Independent System Operator Corporation ("ISO") Tariff, as amended from time to time.

2. **SCOPE:** SDG&E, in cooperation with Coral, will determine through the Study of the ISO Controlled Grid and SDG&E's electrical system the interconnection plan of service that will be required to accommodate all or a part of Coral's request to interconnect new generation projects at SDG&E's Border and Pala Substations, including approximate costs that are likely to be incurred for all related transmission/substation expansions and upgrades required directly

or indirectly for interconnection to the ISO Controlled Grid. The Study will be performed in a fashion that ensures the reliability of the transmission network after the interconnection of the Generators based on relevant portions of the ISO Tariff, Protocols and Grid Planning Criteria, Local Reliability Criteria, WSCC's Reliability Criteria (including voltage stability criteria), SDG&E's TO Tariff, the Transmission Control Agreement, and NERC's planning standards for reasonably anticipated operating scenarios. The Study shall be undertaken in accordance with the study plan ("Study Plan"), dated December____, 2000, which is attached as Appendix A to this Agreement and shall follow the process described in this Agreement.

3. CONTENT OF STUDY: The Study will include the following:

(a) Performance of a technical analysis of SDG&E's system pursuant to the Study Plan to identify transmission expansions or upgrades that may be required to interconnect the proposed generation projects to SDG&E's transmission grid;

(b) an estimate of (i) major equipment required for the requested service; and (ii) the approximate capital cost for transmission system upgrades, modifications or additions and any other transmission system expansions or upgrades required to reliably accommodate the Generator's operation. Detailed facility cost estimates will not be provided pursuant to this Study. Such specifics would be set forth in a separate agreement, if applicable;

(c) a preliminary analysis of congestion management in relation to any necessary system reinforcements associated with the proposed interconnection of the Generators including the mitigation of any system constraints that cannot be reasonably accommodated through ISO Congestion Management as well as those constraints which can be mitigated through congestion management;

(d) a preliminary identification of system benefits associated with any system reinforcements associated with the proposed interconnection of the Generators; and

(e) a preliminary analysis whether an impairment of the tax-exempt status of interest on Local Furnishing Bonds may arise from the expansions or upgrades of SDG&E's transmission grid and, if so, the remedial action required and cost thereof, if any.

4. CORAL REPRESENTATIONS: Coral hereby represents and warrants to SDG&E as follows:

- Coral is and will remain an Eligible Customer as defined in SDG&E's TO Tariff;
- Coral will interconnect to SDG&E's existing transmission/substation facilities;
- Coral has requested a proposed transmission service operations date based on an initial Generator operations date of June, 2001;
- ISO mandated metering and telemetry equipment will be installed by Coral at its expense at locations to be determined by SDG&E;
- Maximum interconnection capacity requested by Coral at any interconnection point is 49 MW (summer/winter) at the Border Substation and 49.9 MW (summer/winter) at the Pala Substation.
- Coral will use due diligence to supply or cause to be supplied to SDG&E in a timely manner technical data needed to conduct the Study that is in all respects complete.

5. STUDY METHODOLOGY: The methodology to be utilized in performing the Study is set forth in the Study Plan which is attached as Appendix A to this agreement.

6. TIME REQUIRED FOR COMPLETION: SDG&E will use due diligence to complete the Study following receipt of a fully executed copy of this Agreement and payment pursuant to Section 10.

7. EXCHANGE OF INFORMATION: SDG&E and Coral shall confer with one another as necessary to exchange information that will provide for the most accurate analysis possible based on the information available at the time the Study is performed. Further, Coral agrees to provide to SDG&E in a timely manner any additional data that SDG&E or Coral reasonably determine may be required to complete the Study.

8. RESPONSIBILITY FOR COSTS OF FURTHER STUDIES: Substantial portions of technical data and assumptions used to perform the Study, including by way of example and without limitation, system conditions and unit modeling may change after SDG&E provides the initial Study results to Coral, e.g. as a result of third party review contemplated by Section 9 hereof. Pursuant to Section 11 hereof, Coral shall be responsible for any additional Study costs that SDG&E may reasonably incur as a result of such new data and assumptions.

9. THIRD PARTY REVIEW: The Study results will not reflect any review or analysis by any third party. Pursuant to Section 10.5 of the TO Tariff, SDG&E shall provide a copy of the Study results to the ISO. If Coral elects to proceed with the application process, in order to determine the potential impact to any third party's electrical system, SDG&E shall provide a copy of the Study results to the Western Systems Coordinating Council, and any transmission owner potentially impacted by the requested service. In the event that new information received from any such entity necessitates a revised System Impact Study, then

pursuant to Section 11 hereof SDG&E shall promptly provide Coral this information and request Coral's consent for SDG&E to undertake further studies at Coral's sole expense. In addition, Coral shall be responsible for any costs required to mitigate any potential impact on a third party's electrical system.

10. PAYMENT: Coral hereby agrees that Coral will pay the full cost for SDG&E to perform the Study as follows:

a. Coral shall reimburse SDG&E for SDG&E's cost of performing the Study; provided, however, that Coral shall not be required to reimburse SDG&E for amounts in excess of the estimated Study costs of $25,000, except as provided in Section 11 below.

b. Upon execution of this Agreement, Coral shall advance to SDG&E by wire transfer or check of immediately available funds pursuant to SDG&E's written instructions, or other form of payment as mutually agreed, $25,000 for the Study. SDG&E shall refund to Coral, without interest, any amounts received by SDG&E, which exceed the actual cost of the Study, even if terminated pursuant to Sections 11 or 13 below.

11. INCREASED COSTS: If at any time SDG&E determines that the Study is expected to cost more than $25,000, SDG&E shall promptly notify Coral and provide an estimate of any additional costs. Upon receipt of such notice, Coral shall provide SDG&E, within 10 business days, either: a written request that SDG&E (i) terminate the Study; or (ii) continue the Study. If Coral requests SDG&E to continue the Study, Coral agrees to pay SDG&E the additional Study costs set forth in SDG&E's written estimate. SDG&E shall have no obligation to incur costs in excess of $25,000 for the Study, unless and until it receives Coral's written request contemplated by this Section 11.

12. RECORDS AND ACCOUNTS: SDG&E shall maintain records and accounts of all costs incurred in performing the Study in sufficient detail to allow verification of all costs incurred, including, but not limited to, labor and associated administrative and general costs, materials and supplies, outside services, and administrative and general expenses. Coral shall have the right, upon reasonable notice, at a reasonable time and place, and at its own expense, to audit SDG&E's records as necessary and as appropriate in order to verify costs incurred by SDG&E for performing the Study.

13. TERMINATION UPON DEMAND: Coral may demand that SDG&E terminate the Study at any time. Immediately following receipt of written notice of such termination from Coral, SDG&E shall terminate the Study. In such case, Coral shall reimburse SDG&E only for the costs actually incurred or irrevocably committed to be incurred by SDG&E for the performance of the terminated Study. Within 14 days following SDG&E's receipt of the notice of termination,

SDG&E shall submit to Coral the results of the incomplete Study in a report including assumptions and calculations available at the time SDG&E receives Coral's termination notice.

14. DISPUTE RESOLUTION: Except as limited below or as otherwise limited by law, the ISO ADR Procedures shall apply to all disputes between the Parties in respect of this Agreement. The ISO ADR Procedures shall not apply to disputes as to whether rates and charges set forth in this Agreement are just and reasonable under the Federal Power Act.

15. MERGER: This Agreement constitutes the complete and final agreement of the Parties with respect to the subject matter hereto and supercedes all prior agreements, whether written or oral, with respect to such subject matter.

16. WAIVER: Any waiver at any time by any Party of its rights with respect to any default under this Agreement, or with respect to any other matter arising in connection with this Agreement, shall not constitute or be deemed a waiver with respect to any subsequent default or other matter arising in connection with this Agreement. Any delay short of the statutory period of limitations in asserting or enforcing any right shall not constitute or be deemed a waiver.

17. TITLES: The captions and heading in this Agreement are inserted solely to facilitate reference and shall have no bearing upon the interpretation of any of the terms and conditions of this Agreement.

18. PRESERVATION OF OBLIGATIONS: Upon termination of this Agreement, all unsatisfied obligations of each Party shall be preserved until satisfied.

19. GOVERNING LAW: This Agreement shall be interpreted, governed by, and construed under the laws of the State of California, without regard to the principles of conflict of laws thereof, or the laws of the United States, as applicable, as if executed and to be performed wholly within the State of California.

20. SIGNATURE CLAUSE: This Agreement shall become effective on the date the fully executed Agreement and payment pursuant to Section 10 is received by SDG&E.

By: Geoff Gaebe
Name: Geoff P. Gaebe
Title: Director – Engineering Services
San Diego Gas & Electric Company

ACCEPTED AND AGREED to this 26 day of December, 2000

By : Beth Bowman
Name: Beth Bowman
Title: Vice President
Coral Power, L.L.C.

PLF

SDGE®

A Sempra Energy™ company

Coral Power, LLC.
Generation Interconnection Projects
System Impact Study

Border and Pala Area Projects

Draft Study Plan

November , 2000

Study Performed for Coral Power, LLC. by San Diego Gas & Electric, Transmission Planning

Table of Contents

Introduction

Coral Power, LLC. (Coral) has contracted with San Diego Gas & Electric Company (SDG&E) to perform a system impact study to interconnect up to two generation projects at SDG&E's existing Pala and Border Substations. The proposed operation date of the generators is June 2001. The maximum interconnection capacity at any interconnection point is 49 MW.

Study Scope

The objective of this study is for San Diego Gas & Electric (SDG&E) to perform a study on behalf of Coral to establish transmission interconnection requirements for the proposed generation additions. A system impact study for the generation additions will be determined at the site locations specified by Coral

Site A - Pala

Install a new 49 MW generation near SDG&E's existing Pala Substation and interconnect at Pala 69 kV bus.

Site B - Border

Install a new 49 MW generation near SDG&E's existing Border Substation and interconnect at Border 69 kV bus.

SDG&E will conduct power flow analysis to examine the impacts of the project on SDG&E system. This study will determine facilities required to meet the applicable reliability criteria. SDG&E will perform preliminary analyses of usability of existing transmission and substation equipment and rough order cost estimates for interconnection required to SDG&E's system by the project.

Coral and SDG&E may agree to expand or modify the study scope during the analysis. If this will result in an increase in study cost, SDG&E will advise Coral.

Study Methodology

The 2001 Heavy Summer base case used in the 2000 Capital Budget Annual Assessment, with all projects including import capability and load growth driven projects that an in-service date up to June 2001, will serve as the pre-project case for the power flow study. The pre-project case will be used to identify system problems in SDG&E, if any, that are not associated with Coral's

generation addition project. Models for later years will be introduced if necessary.

Post-project cases will be developed such that the generation interconnection will displace generation from existing gas turbines already dispatched in the pre-project case. Additional reduction in generation to balance load and resources will be taken from Encina and Southbay power plants. Import will be kept at maximum level.

This preliminary interconnection study is referred to as a "System Impact Study" and explores cost and feasibility of one or more interconnection alternatives. The system study investigates electric system capacity, SDG&E equipment requirement, order-of-magnitude cost estimates, and conceptual schedules to construct the system additions and modification required integrating the interconnection facilities. The study will include a preliminary assessment of congestion management impacts and Local Furnishing Bond considerations as may be applicable.

More detailed studies, engineering design, construction cost estimates can be provided pursuant to a subsequent Facilities Study Agreement or Expedited Service Agreement if Coral elects to proceed based on the preliminary interconnection study results.

Study Assumptions:

1. A 90/10 load forecast of 4256 MW, losses included, with 0.992 high-side substation power factor will be simulated.

2. There will be no import from CFE.

3. The GE PSLF application (Version 11.2) will be used for the power flow analysis.

4. This study only examines the system impact of the proposed Coral project. The study will not investigate the aggregate impact of all proposed generation projects which are in the queue for interconnection study

Study Criteria:

1. The study will be conducted by applying the ISO Grid Planning Criteria, as well as WSCC Reliability Criteria and NERC Planning Standards.

2. The following contingencies will be considered for transmission lines, transformers, and generators:

   - All single contingencies including generators, lines and transformers, (N-1), in the SDG&E system
   - Credible double contingencies (N-2); two lines, one line and one transformer, one line and one generator, and two generators as defined by the WSCC Reliability Criteria
   - Selected overlapping contingencies (N-1-1); one generator out, system adjusted, then an N-1 as defined by ISO Grid Planning Criteria
   - Selected bus section outages.

Study Schedule:

Ref #	Milestones	Target Date*
1.	SDG&E drafts Study Plan SDG&E & Coral agree on the Study Plan	At time of SIS contract execution
2.	SDG&E shares preliminary technical results and findings with Coral.	30 days after executing SIS agreement
3.	SDG&E shares confidential cost and land information with Coral, if applicable.	45 days after executing SIS agreement
4.	Submit Final Report	60 days after executing SIS agreement

* All dates are subject to SDG&E engineering staff and /or consultant availability.

SDGE

A Sempra Energy Company

March 1, 2001

HAND DELIVERED

Mr. Mike Davis
Coral Power, LLC
4320 La Jolla Village Drive #250
San Diego, CA 92122

Re: Electric System Impact Study Agreement for a Second Interconnection at Border Substation

Dear Mr. Davis:

Coral Power, LLC ("Coral") and San Diego Gas & Electric Company ("SDG&E") desire to complete an Electric System Impact Study Agreement ("Agreement") pursuant to SDG&E's Transmission Owner ("TO") Tariff for Coral's proposed Border Generating Unit No. 2. SDG&E hereby tenders an "Electric System Impact Study Agreement". This Agreement (Appendix A) will define the scope, content, assumptions and terms of reference for such study, the estimated time required to complete it, and such other provisions as may be reasonably required.

Upon execution of the Agreement, Coral shall advance payment in accordance with Section 10 of the Agreement.

The Generating Plant will be connected to the Independent System Operator (ISO) Grid, and is obligated to comply with all applicable provisions of the California ISO and California Power Exchange tariffs as they may be amended from time to time.

Pursuant to SDG&E TO Tariff Section 10.3, Coral will have 10 business days upon receipt of the final Agreement to execute and return the Agreement to SDG&E or your application will be deemed withdrawn.

Please review the attached Agreement and let me know when Coral is ready to execute. If you have any questions or comments, please contact me at 858-650-6166.

Sincerely,

Michael J. Iammarino
Senior Energy Administrator

Attachment: Electric System Impact Study Agreement
Draft Study Plan

cc: T. C. Farrelly (w/o attach.)
J. F. Walsh
L. S. Tobias
R. J. Resley (w/o attach.)
S. E. Mavis (w/o attach.)
J. Miller
D. Korinek
A. J. Perez (w/o attach.)

CORAL POWER, LLC-

SAN DIEGO GAS & ELECTRIC COMPANY

ELECTRIC SYSTEM IMPACT STUDY AGREEMENT

(Second Interconnection at Border Substation)

This Electric System Impact Study Agreement ("Agreement") dated March ___, 2001 by and between San Diego Gas & Electric Company, a California corporation with its principal offices located at 8306 Century Park Court, San Diego, California 92123-1593 ("SDG&E"), and Coral Power, LLC ("Coral") with its principal office located at 4320 La Jolla Village Drive, #250, San Diego, Ca. 92122. SDG&E and Coral are each referred to from time to time herein as a "Party" and are collectively referred to herein as the "Parties."

RECITALS

WHEREAS, Coral applied to San Diego Gas & Electric Company ("SDG&E") for an electric transmission interconnection for a second generator to be located near SDG&E's existing Border Substation (the "Generator") under the terms of the Transmission Owners Tariff ("TO Tariff"). These Generators would connect to SDG&E's existing 69 kV transmission/substation facilities.

WHEREAS, SDG&E has not performed an Electric System Impact Study for the second Coral generation addition at this location.

WHEREAS, SDG&E and Coral accordingly desire to enter into this Electric System Impact Study Agreement providing the terms for SDG&E to perform a study to determine such transmission expansions or upgrades that would be required to accommodate Coral's request to interconnect their generation additions to SDG&E's existing transmission/substation facilities (the "Study").

WHEREAS, SDG&E has determined that there is only one substation termination point available for Coral's use at Border Substation and Coral will need to construct the connections needed to bring both of their proposed generators into this common termination point.

NOW, THEREFORE, IN CONSIDERATION OF THE MUTUAL PROMISES AND COVENANTS SET FORTH BELOW, THE PARTIES AGREE AS FOLLOWS:

1. **DEFINITIONS:** All terms with initial capitalization not otherwise defined herein shall have the meanings assigned to them in SDG&E's TO Tariff, as amended from time to time, and the California Independent System Operator Corporation ("ISO") Tariff, as amended from time to time.

(e) a preliminary analysis whether an impairment of the tax-exempt status of interest on Local Furnishing Bonds may arise from the expansions or upgrades of SDG&E's transmission grid and, if so, the remedial action required and cost thereof, if any.

4. CORAL REPRESENTATIONS: Coral hereby represents and warrants to SDG&E as follows:

- Coral is and will remain an Eligible Customer as defined in SDG&E's TO Tariff;
- Coral will interconnect to SDG&E's existing transmission/substation facilities;
- Coral has requested a proposed transmission service operations date based on an initial Generator operations date of June 2001;
- ISO mandated metering and telemetry equipment will be installed by Coral at its expense at locations to be determined by SDG&E;
- Maximum interconnection capacity requested by Coral at this interconnection point is 98 MW (summer/winter) which is equal to the combined capacity of their Border Substation Generation Projects No. 1 and No. 2.
- Coral will use due diligence to supply or cause to be supplied to SDG&E in a timely manner technical data needed to conduct the Study that is in all respects complete.

5. STUDY METHODOLOGY: The methodology to be utilized in performing the Study is set forth in the Study Plan which is attached as Appendix A to this agreement.

6. TIME REQUIRED FOR COMPLETION: SDG&E will use due diligence to complete the Study following receipt of a fully executed copy of this Agreement and payment pursuant to Section 10.

7. EXCHANGE OF INFORMATION: SDG&E and Coral shall confer with one another as necessary to exchange information that will provide for the most accurate analysis possible based on the information available at the time the Study is performed. Further, Coral agrees to provide to SDG&E in a timely manner any additional data that SDG&E or Coral reasonable determine may be required to complete the Study.

8. RESPONSIBILITY FOR COSTS OF FURTHER STUDIES: Substantial portions of technical data and assumptions used to perform the Study, including by way of example and without limitation, system conditions and unit modeling may change after SDG&E provides the initial Study results to Coral, e.g. as a result of third party review contemplated by Section 9 hereof. Pursuant to Section 11 hereof, Coral shall be responsible for any additional Study costs that SDG&E may reasonably incur as a result of such new data and assumptions.

9. THIRD PARTY REVIEW: The Study results will not reflect any review or analysis by any third party. Pursuant to Section 10.5 of the TO Tariff, SDG&E shall provide a copy of the Study results to the ISO. If Coral elects to proceed with the application process, in order to determine the potential impact to any third party's electrical system, SDG&E shall provide a copy of the Study results to the Western Systems Coordinating Council, and any transmission owner potentially impacted by the requested service. In the event that new information received from any such entity necessitates a revised System Impact Study, then pursuant to Section 11 hereof SDG&E shall promptly provide Coral this information and request Coral's consent for SDG&E to undertake further studies at Coral's sole expense. In addition, Coral shall be responsible for any costs required to mitigate any potential impact on a third party's electrical system.

10. PAYMENT: Coral hereby agrees that Coral will pay the full cost for SDG&E to perform the Study as follows:

a. Coral shall reimburse SDG&E for SDG&E's cost of performing the Study; provided, however, that Coral shall not be required to reimburse SDG&E for amounts in excess of the estimated Study costs of $12,500, except as provided in Section 11 below.

b. Upon execution of this Agreement, Coral shall advance to SDG&E by wire transfer of immediately available funds pursuant to SDG&E's written instructions, or other form of payment as mutually agreed, $12,500 for the Study. SDG&E shall refund to Coral, without interest, any amounts received by SDG&E, which exceed the actual cost of the Study, even if terminated pursuant to Sections 11 or 13 below.

11. INCREASED COSTS: If at any time SDG&E determines that the Study is expected to cost more than $12,500, SDG&E shall promptly notify Coral and provide an estimate of any additional costs. Upon receipt of such notice, Coral shall provide SDG&E, within 10 business days, either: a written request that SDG&E (i) terminate the Study; or (ii) continue the Study. If Coral requests SDG&E to continue the Study, Coral agrees to pay SDG&E the additional Study costs set forth in SDG&E's written estimate. SDG&E shall have no obligation to incur costs in excess of $12,500for the Study, unless and until it receives Coral's written request contemplated by this Section 11.

12. RECORDS AND ACCOUNTS: SDG&E shall maintain records and accounts of all costs incurred in performing the Study in sufficient detail to allow verification of all costs incurred, including, but not limited to, labor and associated administrative and general costs, materials and supplies, outside services, and administrative and general expenses. Coral shall have the right, upon reasonable notice, at a reasonable time and place, and at its own expense, to audit

SDG&E's records as necessary and as appropriate in order to verify costs incurred by SDG&E for performing the Study.

13. TERMINATION UPON DEMAND: Coral may demand that SDG&E terminate the Study at any time. Immediately following receipt of written notice of such termination from Coral, SDG&E shall terminate the Study. In such case, Coral shall reimburse SDG&E only for the costs actually incurred or irrevocably committed to be incurred by SDG&E for the performance of the terminated Study. Within 14 days following SDG&E's receipt of the notice of termination, SDG&E shall submit to Coral the results of the incomplete Study in a report including assumptions and calculations available at the time SDG&E receives Coral's termination notice.

14. DISPUTE RESOLUTION: Except as limited below or as otherwise limited by law, the ISO ADR Procedures shall apply to all disputes between the Parties in respect of this Agreement. The ISO ADR Procedures shall not apply to disputes as to whether rates and charges set forth in this Agreement are just and reasonable under the Federal Power Act.

15. MERGER: This Agreement constitutes the complete and final agreement of the Parties with respect to the subject matter hereto and supercedes all prior agreements, whether written or oral, with respect to such subject matter.

16. WAIVER: Any waiver at any time by any Party of its rights with respect to any default under this Agreement, or with respect to any other matter arising in connection with this Agreement, shall not constitute or be deemed a waiver with respect to any subsequent default or other matter arising in connection with this Agreement. Any delay short of the statutory period of limitations in asserting or enforcing any right shall not constitute or be deemed a waiver.

17. TITLES: The captions and heading in this Agreement are inserted solely to facilitate reference and shall have no bearing upon the interpretation of any of the terms and conditions of this Agreement.

18. PRESERVATION OF OBLIGATIONS: Upon termination of this Agreement, all unsatisfied obligations of each Party shall be preserved until satisfied.

19. GOVERNING LAW: This Agreement shall be interpreted, governed by, and construed under the laws of the State of California, without regard to the principles of conflict of laws thereof, or the laws of the United States, as applicable, as if executed and to be performed wholly within the State of California.

20. SIGNATURE CLAUSE: This Agreement shall become effective on the date the fully executed Agreement and payment pursuant to Section 10 is received by SDG&E.

By:_____
Name: Geoff P. Gaebe
Title: Director – Engineering Services
San Diego Gas & Electric Company

ACCEPTED AND AGREED to this _____day of _____, 2001

By:_____
Name:_____
Title:_____
Coral Power, LLC

APPENDIX A

A Sempra Energy company

Border Generating Unit No. 2

SYSTEM IMPACT STUDY

Draft Study Plan

March 1, 2001

Performed for Coral Power, LLC
by San Diego Gas & Electric Company

TABLE OF CONTENTS

INTRODUCTION

Coral Power, LLC ("Coral") has requested that San Diego Gas & Electric Company ("SDG&E") perform a System Impact Study (the "Study") to interconnect 49 MW generation ("Project"). The Project would be a second generation plant proposed by Coral to interconnect at SDG&E's Border Substation. The two units would connect to SDG&E's Border Substation in the same 69 kV line position (i.e., the generators would tap or loop into a common 69kV line en route to the substation bus). The proposed in-service date of the Project is June 2001.

The Study described herein constitutes a "System Impact Study" in accordance with the California Independent System Operator ("Cal-ISO") Tariff and SDG&E's Transmission Owner ("TO") Tariff. It is yet undetermined whether SDG&E will perform the Study itself, or subcontract the Study to a qualified consultant. In either event, SDG&E will be responsible to approve the final work product provided to Coral and this study plan articulates the envisioned studies.

This study plan documents the specific objectives, study scope, methodology, assumptions, and applicable criteria for each of the technical analyses to be performed pursuant to the study agreement for Coral. The study will include the following assessments, which are described in more detail later in this study plan:

(a) a preliminary technical analysis of the ability of SDG&E's transmission system to interconnect the proposed Project at 49 MW output;

(b) further technical analysis to develop a preliminary transmission expansion plan (if required) to accommodate the proposed Project based on power flow simulations and related analysis (known as the transmission "Plan of Service" or POS) including a preliminary short circuit analysis; and

(c) based upon the results of (b), a preliminary cost estimate of the transmission expansion required to interconnect the proposed Project output, and a preliminary estimate of the lead time requirements to plan, design and construct such proposed transmission system upgrades, modification or additions that comprise the tentative POS.

The Study will consider interconnection service only and thus will not examine the delivery of the proposed generation output to any specific wheeling out location, nor will the study examine whether the proposed interconnection service presents possible stability or sub-synchronous resonance ("SSR") problems.

This System Impact Study is preliminary in nature. Prior to executing an interconnection agreement, a more detailed "Facilities Study" and would need to be performed under a subsequent agreement in accordance with the applicable Tariffs of the Cal-ISO and SDG&E if Coral decides to proceed. The Facilities Study would generally include more detailed power flow studies, higher quality cost estimates for transmission improvements, as well as stability modeling and system protection requirements, which are not within the scope of the System Impact Study.

STUDY SCOPE

A. Objectives

The overall objective of the study is to perform preliminary technical analyses to determine whether the proposed Project can be accommodated absent upgrades to SDG&E's transmission system, and if not, to determine on a preliminary basis the transmission system facility upgrades and additions needed to the transmission grid of SDG&E to accommodate the Project. Such identified facilities will include the system upgrades that would be required to interconnect the Project to SDG&E's transmission grid while maintaining reliability of the transmission network, based on the California Independent System Operator (Cal-ISO) Grid Planning Criteria, Local Reliability Criteria, WSCC's Reliability Criteria (including Voltage Stability Criteria), and NERC's Planning Standards, for various reasonably-expected operating scenarios. ISO Congestion Management protocols will be assumed, if and when the are applicable, during the study.

B. Responsibilities

SDG&E, in cooperation with the Cal-ISO and with input from Coral, will develop the power flow modeling necessary to run the studies. Coral is expected to provide any required data for modeling their new plant equipment, including but not limited to generator and step up transformer data for steady state power flow modeling. Additional data, such as generator dynamic model data for transient stability analysis, and data for post-transient voltage stability analysis, would also be required at a later date for the purpose of performing a detailed Facilities Study (if subsequently requested by Coral).

The preliminary technical analyses will include:

- Steady State Power Flow Analysis
- Preliminary assessment of the impact of the plant on system short circuit duties
- Preliminary Engineering studies to produce order-of-magnitude cost estimates for the identified POS (includes transmission, substation, land, permitting and other known activities).
- Assessment of congestion management impacts as appropriate.

Sub-Synchronous Resonance (SSR) is a potential generator-transmission system interaction problem that can occur when a large generator is tied to the sending end of a long, series-compensated transmission system. In the case of the proposed Project, SDG&E knows of no precedent in which this situation may pose an SSR problem. Nonetheless, if a decision is made to proceed with this proposed Project, we encourage Coral to pursue this question through a consultant of its choosing to ensure that SSR is not an issue. The sole purpose of the study to be performed by SDG&E is to address impacts of the Project on the system, and not to address potential impacts of system phenomena on the Project facilities.

BASE CASE MODELING AND ASSUMPTIONS

The 2001 Heavy Summer and off peak base cases used in SDG&E's 2001 annual transmission planning assessment will serve as the base cases for the power flow study. As appropriate, grid expansion projects that have been identified in the annual transmission planning assessment with an in-service date up to June 2001 will be modeled in these cases. However, some model variations may be run to test the impact of potential SDG&E project delays or cancellations. The base cases will be used to document pre-existing SDG&E system problems, if any, that exist prior to the interconnection of the Project.

Post-Project cases will be developed from the base cases and will represent the Project with interim and final interconnection conditions. The post-Project cases will be used to identify any SDG&E/ISO/Regional transmission system problems that are associated with the generation interconnection and output of the Project.

POWER FLOW ANALYSIS

A. Study Objectives

a) Identify any thermal overload, voltage or short circuit problems associated with the Project.

b) Identify system reinforcements that would mitigate any system problems associated with the Project. As an interim measure, consider the use of possible RAS options.

c) Identify the amount of generation reduction "required to avoid a system emergency overload caused by this project", as requested by Coral, if applicable. Assuming an adequate transmission POS is developed to meet the applicable reliability criteria, then generation reduction should not be required to avoid a system emergency overload.

B. Study Scope / Methodology

a) The following scheduling scenarios are proposed to be studied both with and without the Project:

- Minimum import into the SDG&E system and maximum generation internal to the SDG&E system (varying the import level to match the load with and without modeling the Project).
- Maximum import into the SDG&E system and maximum generation at Coral (varying the dispatch level of South Bay generation to match the load with and without modeling the Project).
- Adjust system load levels for various operation conditions.

Both units at the San Onofre Nuclear Generating Station (SONGS) will be modeled on-line for this study.

A recommended Plan of Service will be determined by adding appropriate incremental transmission reinforcements and then performing iterations of contingency analysis until all the system problems are mitigated.

b) New base cases that include all the proposed transmission reinforcements will be developed and tested to ensure that the proposed transmission Plan-of-Service addresses all reliability concerns identified.

C. Study Assumptions

a) Heavy summer (90/10) and off peak load forecasts will be simulated for SDG&E's service territory, as used in the 2001 SDG&E annual transmission planning assessment (to be revised as appropriate).

b) Appropriate model data for the SDG&E system will be used, including planned 2000-2001 transmission expansion projects and all proposed generation additions that are in SDG&E's TO Tariff application queue ahead of the Project.

c) All of the new generation will be assumed to be delivered to the SDG&E/Cal-ISO system, in accordance with Coral's proposal.

d) The GE PSLF power flow program will be used for the power flow analysis.

D. Study Criteria

a) The study will be conducted by applying the ISO Grid Planning Criteria, Local Reliability Criteria, WSCC Reliability Criteria and the NERC Planning Standards.

b) The following contingencies will be considered for the SDG&E system:

- All single contingencies including generators, lines and transformers (N-1).
- Credible double contingencies (N-2): two lines on common structures or right-of-way, and two generators at a common switchyard and voltage level as defined by the WSCC Reliability Criteria.
- Selected overlapping contingencies (N-1-1) as defined by the Cal-ISO Grid Planning Criteria (particularly a G-1, system readjusted, followed by an N-1).
- Selected contingencies in the Arizona and SCE systems.

c) The ISO planning criteria has not yet quantified loss of load limits. The following list specifies permissible load shedding amounts (if any) for various types of contingency conditions, based on SDG&E's application of the Cal-ISO Grid Planning Criteria:

- No load shedding will be permitted for N-0 (all facilities in service) and N-1 (single contingency) events, which include line, transformer and generator contingencies;
- No load shedding will be considered acceptable for the outage of one generator followed by system readjustment and a subsequent N-1

transmission contingency, in accordance with the Cal-ISO grid planning criteria;

- Up to 200 MW of load may be shed for an overlapping outage (N-1-1) or for a credible double contingency (N-2), except as described above. However, load shedding exposure with the addition of the proposed generation will not be allowed to exceed pre-project load shedding exposure for the same contingency event(s) ; and

- Generator tripping may be considered as a remedial action for the same conditions under which load shedding may be considered (severe multiple contingencies). However, under peak summer conditions, generator tripping may present adequacy issues which must be considered.

E: Study Schedule:

Ref #	Milestones	Target Date*
1.	SDG&E & Coral agree on the Study Plan	At time of SIS contract execution
2.	SDG&E shares preliminary technical results and findings with Coral.	30 days after executing SIS agreement
3.	SDG&E shares confidential cost and land information with Coral, if applicable.	45 days after executing SIS agreement
4.	Submit Final Report	60 days after executing SIS agreement

*Notwithstanding State of California Executive Order D-26-01, all dates are subject to SDG&E engineering staff and/or consultant availability.

San Diego Gas & Electric
8316 Century Park Court
San Diego, CA 92123-1582

cc File Border 51
P West
M Turner
W Reisig

A Sempra Energy company

February 16, 2001

Mr. Mike Davis
Coral Power
4320 La Jolla Village Dr., #250
San Diego, CA 92122

Dear Mr. Davis:

Subject: **SDG&E Interconnection Study**

Pursuant to our recent System Impact Study agreement, enclosed for your review and comments is a draft report summarizing SDG&E's preliminary analysis of your electric interconnection request. This report includes preliminary technical study results, a description of the required interconnection facilities and any SDG&E system upgrades, interconnection cost estimates, and discussion of any transmission congestion issues identified during our analysis.

All information provided in the System Impact Study is preliminary and subject to change. Pursuant to the California ISO Tariff and SDG&E's Transmission Owner Tariff, final technical analysis and refinement of cost estimates can be performed under a separate Facilities Study Agreement or you may chose to execute an Expedited Service Agreement covering final engineering analysis, design, cost estimates, construction and energization.

Although a summer 2001 SDG&E/ISO system model has been utilized in performing this interconnection analysis, the release of this study does not constitute a commitment by SDG&E to complete these interconnection facilities by the applicant's proposed in-service date.

If you have any questions regarding this report or the options available to proceed with the interconnection project, please feel free to contact me at (858) 654-1580. Following receipt of comments from the California ISO, SDG&E will finalize and reissue this study report.

Sincerely,

Dave Korinek / by Allen M. Ahad

David Korinek, Manager
Transmission Planning

cc: B. Bowman, Coral
M. Evans, Coral
J. Miller, ISO
M. Awad, ISO
G. Gaebe
M. Iammarino
S. Peterson
D. Chan

SDGE®

A Sempra Energy™ company

SYSTEM IMPACT STUDY OF THE PROPOSED 49 MW GENERATION PROJECT AT BORDER SUBSTATION

UNIT NO. 1

DRAFT REPORT
VERSION 1.0

February 16, 2001

Study Performed for Coral Energy, LLC.
by San Diego Gas & Electric Company

Table of Contents

EXECUTIVE SUMMARY

Coral Energy, LLC has requested that SDG&E conduct a "System Impact Study" for the electrical interconnection of a 49MW power plant project at Border substation. The proposed generation plant is part of the year 2001 RFB capacity contracts offered by CA-ISO. The purpose of the study is to determine the electric transmission requirements to interconnect the proposed a 49 MW power plant project to SDG&E's existing 69 kV transmission/substation facilities. Six other 2001 RFB generating projects were added in the study case at Otay, Border, El Cajon, Mission and Escondido Substations. A total of 343 MW generation addition (seven 49 MW RFB units) was simulated in this study to assess the system impact and interconnection requirements for those proposed RFB generation projects. The proposed operation date for all the power plants is in June 2001. Preliminary power flow, stability and short circuit analyses have been performed to examine the system impact of the proposed generation projects by using SDG&E's most recently approved transmission expansion plan.

This report identifies the preliminary interconnection requirements for Coral's proposed generation project. Preliminary cost estimates for interconnection of the proposed generation project quoted in this report are conceptual estimates. Final design and construction costs may vary from these estimates. Due to the extremely short project schedule, there is not enough time to construct grid improvements to mitigate various congestion constraints caused by these 2001 summer RFB generator additions. Therefore, remedial action schemes have been assumed for the purpose of these cost estimates as an interim approach. The cost of any system upgrades required to permanently mitigate congestion issues for the proposed generation projects is beyond the scope of this study. The project scopes and designs for the system upgrades will be examined in the next phase study, called the Facility Study, or under the terms of an Expedited Service Agreement.

Coral proposes a 49MW gas turbine interconnected to SDG&E's Border 69 kV substation bus via a radial 69kV (approx. 1 mile) generator lead. It is assumed that Coral will build the radial, underground line from the generator to a wood riser-pole outside SDG&E' Border Substation. The ownership demarcation point between Coral and SDG&E for the proposed radial line is at fence-line of Border Substation. SDG&E's preliminary cost estimates for its portion of the interconnection project is $456,000. The cost will also cover the generator tripping schemes required as an interim measure due to congestion constraints, and is required in order for the unit to be dispatched for ISO peaking capacity concurrently with existing generators. The RAS costs have been split between separate merchant plants.

The preliminary study indicates that the combination of Coral's generation at Border and two other RFB generators in the area (Border and Otay) would cause N-1 thermal overload problems on TL642, TL644, TL614 and TL658 during high South Bay generation conditions. These congestion management constraints that would limit the

combined dispatch capability of South Bay generation, downtown gas turbines and the proposed 2001 generators. This dispatch constraint is unacceptable because the proposed generators are under contract to supply summer peaking capacity to the ISO and the congestion constraint would not allow an increase in the generation dispatch for this area over existing levels. A temporary solution has been identified to mitigate this constraint by installing an automated generator cross-tripping scheme for these transmission contingencies. With the cross-tripping scheme the proposed generators would be allowed to dispatch on a normal basis when needed for ISO peaking generation capacity.

Preliminary short circuit analysis also identified two 69 kV circuit breakers at South Bay generation plant (breaker 3N and 3S) that would be overstressed above their rated interrupting capability with the addition of one or more of generators in the vicinity of South Bay, Otay, San Ysidro or Border Substations. These breakers are associated with the South Bay GT, which is owned by the San Diego Unified Port District. Either replacement of these breakers or installation of current limiting fusing on the Border generator will be required to mitigate this breaker overstress. These costs are also Coral's responsibility, but have not been included in SDG&E's estimate.

At each point of interconnection requested with SDG&E's substation facilities, if at some time in the future SDG&E requires the use of the proposed substation position for its own transmission and distribution system expansion, the merchant unit interconnection facilities will need to be relocated at Coral's expense.

Certain merchant generator applications that were in SDG&E's TO Tariff queue prior to this request, buth with a later in-service date, have not been modeled in this study. It is possible that when those other projects are modeled in combination with this request, it may reveal additional short circuit breaker overstress conditions. If so, Coral Power will be responsible for mitigating the additional short circuit constraints.

INTRODUCTION

Coral applied to San Diego & Electric Company for an electric transmission interconnection of a generation facility located near SDG&E's Border substation, under the terms of SDG&E's Transmission Owner Tariff (TO Tariff). The proposed generation plants are part of the year 2001 RFB capacity contracts offered by CA-ISO. The purpose of the study is to determine the electric transmission expansion or upgrade requirements to accommodate Coral's request to interconnect to SDG&E's existing 69 kV transmission/substation facilities. The proposed generator operation date is in June 2001.

The Proposed plant is located approximately 1 mile from SDG&E's Border Substation. It is assumed that Coral will build and own the new 1 mile radial 69kV circuit from the plant site to a wood riser-pole outside Border Substation 69kV switchyard work is required at Border to terminate the Coral's line. Customer will be responsible to install metering equipment that complies with ISO specifications.

DISCUSSION OF STUDY RESULTS

Power flow and short circuit analyses have examined the system impact of the proposed generation project by adding them to the electrical model of SDG&E's system which reflects our currently approved transmission expansion plan. This plan was developed through SDG&E's 2000 grid assessment study and corresponding ISO stakeholder process. The expansion plan has received the ISO's full concurrence. Six other 2001 RFB generating projects were added in these base cases at Otay, Border, El Cajon, Mission and Escondido Substations. A total of 343 MW generation addition (seven 49 MW RFB units) was simulated in this study to assess the system impact and interconnection requirements for those proposed RFB generation projects. Sensitivity studies were performed to examine the system impact caused by individual generation unit.

Border Plant

Coral has requested SDG&E to conduct an interconnection study for a 49 MW generation plant at Border substation with an in-service date of June 2001. A total of seven RFB generation units were modeled in this study. Three units (two at Border and one unit at Otay) were located in South Bay area. Any generation addition in South Bay area could create dispatch constraints on all generators in the area, including South Bay power plant and downtown gas turbines.

The preliminary study indicates that the proposed two 49 MW at Border Substation and one 49 MW at Otay would cause N-1 thermal overload problems on TL642 (South Bay-Sweetwater), TL644 (South Bay-Sweetwater), TL614 (Sweetwater-National City-

Chollas-Sampson) and TL658 (Sampson-Division) during high South Bay generation condition. Appendix E shows the power flow maps and results.

Sensitivity Study for RFB Generators Dispatch in South Bay area

The addition generation in South Bay area would cause N-1 overload problems during high South Bay generation condition. This study reviewed the system impact with various dispatch scenarios from the proposed generation units in South Bay area. Table 1 shows power flow results for one of the critical outages with various dispatch scenarios for the proposed South Bay generators. Appendix F shows the power flow maps and results.

Contingency: N-1 South Bay-Sweetwater					
South Bay Power Plant at Maximum (690MW)					
Number of 49MW units		Loading on Montgomery Tap-Sweetwater		Loading on South Bay-Montgomery Tap	
Border	Otay	Normal Rating: 100MVA	15min. Emerg. Rating 125MVA	Normal rating: 100MVA	15min. Emerg. Rating 125MVA
0	0	96%	76%	87%	70%
0	1	121%	96%	103%	82%
1	1	133%	106%	110%	88%
2	1	144%	115%	118%	94%

Table 1 Sensitivity Study for RFB Generators Dispatch in South Bay area

South Bay Power Plant Dispatch Sensitivity Study

The addition of these generators will result in congestion management constraints that would limit the combined dispatch capability of South Bay generation and the proposed RFB generators. This sensitivity study examined the generation curtailment on South Bay 69 kV generation (SYGT & SY unit #1) and the 138 kV generation (SY unit #2, #3 & #4) due to thermal overload caused by the addition generators in South Bay area. These RFB generators could create dispatch constraints on the generation at South Bay 69 kV for about 1 to1 ratio. That means one MW addition generation from RFB units would reduce dispatch capability at South Bay 69kV by one MW. The study results also show that 414 MW generation reduction at South Bay 138 kV (SY unit #2, #3 & #4) will be needed to alleviate the N-1 overload problems caused by the RFB generation addition. Appendix G shows the power flow maps and results.

Downtown Gas Turbine Dispatch Sensitivity Study

The addition of the RFB generators in South Bay area would cause thermal overload problem on TL658 (Sampson-Division). The overload would result in congestion management constraints that would limit the combined dispatch capability of the existing gas turbines in downtown area and generation in South Bay area (including all existing South Bay units and proposed 2001 RFB units). Table 2 summarizes the impact of combined generation in South Bay area and downtown area. Appendix F shows the power flow maps and results.

N-1 Sweetwater-National City-Chollas-Sampson

Generation					Loading on Sampson-Division 69 kV
Border	Otay	DIGT	NSGT	Total South Bay gen	Rating: 100MVA (no emg rating)
0 MW	49 MW	13 MW	20 MW	690 MW	99%
49 MW	49 MW	13 MW	20 MW	690 MW	110%
98 MW	49 MW	13 MW	20 MW	690 MW	120%

Table 2 Downtown Gas Turbine Dispatch Sensitivity Study

Sensitivity Study for Local Substation Load Demand

Based on the SDG&E's year 2001 load forecast, the adverse peak load demand at Border and Otay Lake substations are 28MW and 4MW, respectively. The load demand at these two substations is supporting by two 69kV lines, TL6910 (Border-Miguel, rating at 137MVA) and TL649 (Border-Otay Lake-San Ysidro-Otay). TL649 composes of various sizes of conductors rated between 137 MVA and 50MVA. A 5.5 miles (68 MVA) line segment of TL649 (TL649F, Border Tap-Otay Lake Tap 70 MVA line) appears to be a weak link to transfer power from Border. TL649F would create congestion constraints on Border generators during outage of TL6910 (Border-Miguel). The congestion could occur during off peak hours when total load at Border and Otay Lake is less than 30 MW. An automatic generator cross-tripping scheme at Border is needed to prevent transmission line overload and maintain system reliability during off peak hours. Without the cross-tripping scheme the proposed generators would not increase the ISO's net peaking generating capacity. The need for cross-tripping could be eliminated through transmission reinforcement.

Short Circuit Analysis for Border Site

Some typical data were used for this study since Coral has not provided actual generator data. The study shows that two 69 kV circuit breakers at South Bay generation plant (breaker 3N and 3S) will be overstressed above their rated interrupting capability with the addition of one or more of generators at Otay Substation and /or Border Substation.

Temporary Protection Scheme for Border Site

The system upgrades would require at least 1 to 2 years construction lead-time. It becomes impossible to provide adequate transmission support for the RFB generators interconnected at Border Substation by June 2001. For a temporary solution, it is recommended to install an automated generator cross-tripping scheme at Border. The scheme will trip the RFB units at Border off line when the transmission contingencies were occurred. This cross-tripping scheme is needed to prevent potential cascading outages caused by overload and damage to the equipment. Without a cross-tripping scheme the proposed generators would not increase the ISO's net peaking generation capacity. As shown in table 1, dropping generation units would help to relief the transmission overload problems.

Long Term Solution for Border Site

The generator cross-tripping scheme is just a temporary operating solution for the overload problem caused by the new addition generation in South Bay. Due to the relatively high probability of transmission outages (a total of five critical outages) and complicated operating scheme, the cross-tripping scheme is not recommended as a long term solution. The transmission upgrades will provide a permanent fix for the system problem and maintain system reliability. However, the project scopes and designs for the system upgrades is outside the scope of this study. The Facility Study or analysis done under an Expedited Service Agreement will identify the project scopes and designs for the system upgrades to provide adequate transmission support for the proposed generators interconnected at Border Substation.

Project Scope for Interconnection

The project scope and cost estimates for interconnection of the Coral generating project are based on preliminary engineering design. Permanent SDG&E system upgrades required to mitigate transmission contingency constraints for these generator interconnections are not covered in this study:

Border Plant:

Transmission Construction:
Construct a short 69 kV line from Border switchyard to a wood riser-pole outside the substation fence. It is assumed that Coral will construct and own the radial 69 kV underground line from generator to the wood pole.

Cost $93,000

Substation Construction
Install a new 69 kV circuit breaker and associated equipment.

Adjust protection system settings.
Install communication equipment.
Update EMS system
Install cross-tripping scheme
Cost $363,000

Total cost: $456,000

It assumed that customer will install the ISO compliant metering equipment and current limiting fusing on the generator or work with San Diego Unified Port District on South Bay GT breaker overstress concern (3N & 3S). Coral will own the radial 69kV line. The demarcation point of the radial line between SDG&E and Coral is at the Border Substation fence.

Environmental and Permits

Based on the tentative plant site information received from Coral, SDG&E's preliminary review indicates that FAA permits might be required for new 69kV line construction around Border Substation.

APPENDIX A

Study Scope

SDG&E will determine through the study of the ISO Grid and SDG&E's electrical system the interconnection plan of service that will be required to accommodate all or a part of Coral's requested interconnection to SDG&E's 69 kV transmission/ substation facilities. This study will include conceptual cost estimates that are likely to be incurred for all related transmission/substation expansions and upgrades required directly or indirectly for the interconnection to the ISO Controlled Grid. The study has been performed to ensure the reliability of transmission network after the interconnection of the Generation based on relevant portions of ISO Tariff, Protocols and Grid Planning Criteria, Local reliability Criteria, WSCC's Reliability Criteria (including voltage stability criteria), SDG&E's TO Tariff, the Transmission Control Agreement, and NERC's planning standards for reasonably anticipated operating scenarios.

This study includes the following analyses:

- Conduct power flow and short circuit analyses to establish impacts of the project and to determine facilities required meeting the established reliability criteria.

- Examine physical usability of existing transmission circuits, cost estimates for facilities to upgrades required to SDG&E's system by the project and cost estimates facilities to interconnect the project to SDG&E's system

- Review system protection scheme to accommodate the project interconnection to SDG&E's system

- Review and identify new right-of-way and permits issues for project interconnection

- Identify construction schedules for project interconnection and any system upgrades

APPENDIX B

Study Assumptions

Based on the information from Coral, SDG&E will model a 49 MW plant interconnected to the existing Border, El Cajon, Mission and Escondido. Three other 2001 RFB generating projects were added in the study case at Otay, Border and Escondido Substations. A total of 343 MW generation addition (seven 49 MW RFB units) was simulated in this study to assess the system impact and interconnection requirements for those proposed RFB generation project.

For power flow analysis, the system representation is modeled based on the SDG&E's latest forecast for a 2001 Heavy Summer (peak load) scenario with the pre-existing system configuration. For short circuit study, 2001 base case was used to simulate short circuit calculation and examine the impact of the proposed generation

APPENDIX C

Study Tools and Criteria

The General Electric Power System Planning Program (GE-PSLF V11.2), Positive Sequence (Load Flow) has been used in conjunction with in-house Engineer Programming Control Language (EPCL) routines to help analyze the study results. The ASPEN Oneliner Program V5 has been used use for short circuit simulation.

Studies have been performed to determine the facilities required for the system to continue to meet all current reliability criteria for the Post-Project Scenario. Such reliability criteria include the North American Electric Reliability Council (NERC) Planning Standards, the Western Systems Coordinating Council (WSCC) Reliability Criteria, the California Independent System Operator (Cal-ISO) Grid Planning Standards, and SDG&E's standard practices.

APPENDIX D

Study Methodology

The methodology by which the Rating Study will be performed is outlined as follows:

1. Development of Base Cases / Benchmarking

The objective of the base case development is to develop a base case that would tend to stress the local area for the 2001 system configuration. A heavy summer peak load scenario with "adverse weather" load (called a 90/10 or "one-in-ten-year" forecast) is used for this purpose. Benchmarking is used to establish that the system requirements are met in absence of the proposed generation projects, so that facilities required in the post-project cases to meet the reliability criteria are used to establish the incremental facilities required by the projects.

2. Post-Project Studies

The post-Project studies examine all-lines-in-service conditions as well as a full set of contingencies, reflecting the requirements of all applicable reliability criteria. Plant VAR requirements and special system protection or remedial action schemes (if required) are expected to be identified by the studies.

APPENDIX E

Power Flow Maps for Border Plant

Pre-project Condition

Post project condition

Appendix E-1

Power Flow for Pre-project Condition

Total South Bay Generation: 690 MW
Otay RFB unit = 49MW

1) N-0 Base Case
2) N-1 Sweetwater-South Bay 69kV
3) N-1 Sweetwater-South Bay-Montgomery 69kV
4) N-1 Sweetwater-National City-FOT-Naval Station 69kV
5) N-1 Sweetwater-National City-Chollas-Sampson 69kV
   (With DIGT= 0; NSGT= 0)
6) N-1 Sweetwater-National City-Chollas-Sampson 69kV
   (With DIGT= 13; NSGT= 20)